UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
WATER AND
WATERSHEDS

February 28, 2019

Gregory M. Hughes
State Supervisor
U.S. Fish and Wildlife Service
Idaho Fish and Wildlife Office – Boise
1387 South Vinnell Way, Suite 368
Boise, Idaho 83709

Re: Reasonable and Prudent Alternative for the Copper Aquatic Life Criteria in the 2015 Biological Opinion on Idaho's Water Quality Standard for Toxic Pollutants

Dear Mr. Hughes:

The purpose of this letter is to confirm that the U.S. Environmental Protection Agency's proposed approval of Idaho's revised aquatic life criteria for copper complies with the reasonable and prudent alternative (RPA) for copper set forth in the U.S. Fish and Wildlife Service's June 25, 2015 Biological Opinion on the Idaho Water Quality Standards for Numeric Water Quality Criteria for Toxic Pollutants (01EIFW00-2014-F-0233). On January 28, 2019, the EPA received from the Idaho Department of Environmental Quality (DEQ) the revised aquatic life criteria for copper for agency review and action under the Clean Water Act section 303(c). The Enclosure 1 to this letter summarizes the background information associated with copper water quality standard revisions submitted by DEQ.

The RPA for the aquatic life criteria for copper stated:

> *"The EPA shall ensure, either through EPA promulgation of criteria or EPA approval of a state-promulgated criteria, that new acute and chronic criteria for copper are in effect in Idaho by May 7, 2017. The new criteria shall be as protective or no less stringent than the 2007 CWA section 304(a) national recommended aquatic life criteria (i.e. the Biotic Ligand Model [BLM]) for copper or an alternative criteria such as an updated BLM or similar modeling approach. The Service does not anticipate that additional consultation will be required if the 2007 national recommended aquatic life criteria for copper or other alternative criteria which would be as protective for copper are adopted by EPA."*

The EPA has reviewed the DEQ submission, including the *Implementation Guidance for the Idaho Copper Criteria for Aquatic Life, Using the Biotic Ligand Model, August 2017*, and determined it is consistent with RPA. DEQ's rule specifies that copper criteria will be derived using the BLM, consistent with EPA's 2007 national recommended aquatic life criteria for copper. Importantly, DEQ's rule also specifies that input data used to run the BLM "shall be planned to capture the most bioavailable conditions for copper." In the *Implementation Guidance* that DEQ incorporated into its rule by reference, the state has given consideration to when

copper might be most bioavailable and how to ensure collection of BLM inputs during those times (e.g., "when designing monitoring programs or assessing data for derivation of BLM criteria, users should consider using continuous pH data to capture the daily variability of pH at a given site or collecting samples early in the day when temperatures and pH are generally at their lowest." (p. 16), and "DOC is usually at its lowest concentrations in late fall in Idaho, based on data that is considered representative of streams supporting anadromous fish (Appendix C of NMFS [Biological Opinion] 2014)." (p. 20)).

DEQ's *Implementation Guidance* also discusses other important considerations such as how to address situations where data are unavailable to run the BLM, and how to reconcile multiple BLM outputs under different circumstances. Appendix C (Table 3) of the NMFS BiOp provides some examples of how conservative estimates might be calculated from various datasets in the absence of site-specific data for the BLM. DEQ followed a similar process to calculate conservative estimates that can be used in the absence of site-specific data. While DEQ used its own dataset that is not necessarily comparable to the various datasets evaluated in Appendix C (Table 3), the conservative estimates that DEQ included in its *Implementation Guidance* are roughly comparable for the waters in question (see Enclosure 2). The EPA expects by adopting the language into rule regarding implementation of the model during the times and conditions when copper is most bioavailable, coupled with the information in the *Implementation Guidance*, DEQ will implement the criteria in a manner that is protective of designated uses and consistent with the Opinion.

The EPA appreciates the collaborative working relationship with the Service and assistance we have received from staff in your office. If you have any questions or would like to discuss further, please contact Lisa Macchio, the EPA staff lead, at (206) 553-1834.

Sincerely,

Hanh Shaw, Manager
Water Quality Standards Unit

Enclosures

Electronic cc: Sandi Fisher, USFWS
Jeremy Moore, USFWS
Jason Pappani, DEQ

Enclosure 1 to the EPA's Letter Confirming Compliance with the Reasonable and Prudent Alternative for the Copper Aquatic Life Criteria

Background

In October 2015, DEQ initiated the negotiated rule making process to revise Idaho's copper aquatic life criteria. DEQ initiated the rulemaking, rule docket 58-0102-1502, in response to the reasonable and prudent alternatives identified in the biological opinions from the National Marine Fisheries Service and U.S. Fish and Wildlife Service, which determined that Idaho's previous copper criteria were likely to jeopardize the continued existence of endangered species and result in the destruction or adverse modification of designated critical habitat under the Endangered Species Act.

DEQ held nine negotiated rulemaking and guidance development meetings between October 28, 2015 and July 18, 2017, including four public comment periods for various drafts of the rule. A fifth draft was published as the proposed rule in the September 6, 2017 Idaho Administrative Bulletin, followed by a formal 30-day comment period. The rule was finalized by the 2018 Legislature and became effective under Idaho Law on March 28, 2018. The rule references the "Implementation Guidance for the Idaho Copper Criteria for Aquatic Life: Using the Biotic Ligand Model," which details procedures for implementing the criteria.

Consistent with the federal water quality standards regulations at 40 C.F.R. §§ 131.11 and 131.12, states must adopt water quality criteria that protect the designated use. In establishing criteria for toxic pollutants, states should establish numerical values based on:

- The EPA's 304(a) guidance; or
- Modifying the EPA's 304(a) guidance to reflect site-specific conditions; or
- Other scientifically defensible methods.

More information on the EPA's nationally recommended 304(a) aquatic life criteria for copper can be found at: https://www.epa.gov/wqc/aquatic-life-criteria-copper

Additional information and documents related to DEQ's revised copper criteria are available at the following:

- Copper rule revisions: http://www.deq.idaho.gov/media/60180617/58-0102-1502-proposed-rule-notice-0817.pdf
- Response to comments: http://www.deq.idaho.gov/media/60180837/58-0102-1502-public-comment-summary-1017.pdf
- Guidance document incorporated by reference in rule: http://www.deq.idaho.gov/media/60180840/58-0102-1502-implementation-guidance-idaho-copper-criteria-aquatic-life-1117.pdf

Enclosure 2

NMFS Appendix C Subbasin	NMFS Appendix C Cu Benchmark Concentration (µg/L)	Comparable ID Basin or Ecoregion	Comparable ID Conservative Estimate
Selway, Lochsa, MF Clearwater R	0.6	Northern Rockies ecoregion	0.9
SF Clearwater River	1	Northern Rockies ecoregion	0.9
MF and SF Salmon and tributaries	1	Northern Rockies ecoregion	0.9
Upper Salmon R	3	Salmon Basin	2.4
Upper Salmon R tributaries	3	Salmon Basin	2.4
Panther Creek	3	Salmon Basin	2.4
Lemhi and Pahsimeroi Rivers	6	Middle Rockies ecoregion	5.2
Lower Salmon (downstream of SF Salmon)	3	Salmon Basin	2.4
Snake River	6	Upper Snake Basin and Snake River Plain ecoregion	1.6-2.0